

Question 1

What are the patterns of utilization of HIV services of persons in Louisiana?

This section focuses on information that pertains to HRSA HIV/AIDS care planning groups. Specifically, this section characterizes the patterns in the use of services by a number of populations in the state of Louisiana. The information was provided by HRSA-funded programs as well as supplemental studies that have been conducted to examine specific aspects of HIV care in Louisiana.

In 1990, Congress enacted the Ryan White CARE Act to provide funding for states, territories, and EMAs to offer primary care and support services for persons living with HIV disease who lack health insurance and financial resources for their care. Congress reauthorized the Ryan White CARE Act in 1996 and in 2000 to support Titles I–IV, Special Projects of National Significance (SPNS), the HIV/AIDS Education Training Centers and the Dental Reimbursement Program, all of which are part of the CARE Act.

Highlights

- Ryan White CARE Act Title II clientele reflected the population in Louisiana affected by the epidemic in 2001. Sex, race/ethnicity, and age of the CARE Act clientele were similar to those of persons reported to the Louisiana Office of Public Health HIV/AIDS Surveillance System.
- During 2001, Ryan White CARE Act Title II funds were used primarily to provide case management and medical care services to the 4,125 clients enrolled in the program.
- Through the Louisiana AIDS Drug Assistance Program (ADAP), 1,440 persons received antiretroviral therapy (ART) in June 2001. Most of these persons were male, black, 19 years of age or older, and at or below 200% of the poverty level.
- Results from the Survey of HIV Disease and Care illustrate the widespread prescribing of ART (86%) and highly active antiretroviral therapy (HAART) (64%) in 1998 among HIV patients in southeastern Louisiana. Prophylaxis for *Pneumocystis carinii* pneumonia (PCP) was prescribed less frequently (indicated on the medical charts of only 58% of eligible patients). Few differences were noted in the prescribing of ART, HAART, or PCP prophylaxis, with the exception of insurance status.
- The 2000 Adult/Adolescent Spectrum of HIV Disease (ASD) study reported that HAART was prescribed to 76% of patients and that the practice did not differ substantially by patient characteristics. Overall, PCP prophylaxis was prescribed for 76% of eligible patients, and prophylaxis for *Mycobacterium avium* complex (MAC) was prescribed for a similar proportion (70%). These medications were prescribed for larger proportions of black patients than for white or Hispanic patients.
- Analysis of HIV testing delays shows that some groups may not have had access to, or may not have used, available counseling and testing services early in the course of infection.

The purpose of Title II funding is to improve the quality, availability, and organization of health care and support services for individuals and families with, or affected by, HIV disease in each state or territory. In addition, the funding provides access to needed pharmaceuticals through ADAP.

In 2001, a total of 4,125 clients received services funded through the Ryan White Title II award; of these, 871 persons were new clients. During 2001, the distribution of Title II CARE Act clients by race/ethnicity, sex, and age was similar to the distribution of these characteristics among persons known to be living with HIV/AIDS in Louisiana at the end of 2001 (Table 27).

Table 27. Comparison of demographic characteristics of CARE Act Title II clients and persons living with HIV/AIDS, Louisiana, 2001

	CARE Act clients, % (N = 4,125)	Persons living with HIV/AIDS, % (N = 13,565)
Race/ethnicity ^a		
White, not Hispanic	25	32
Black, not Hispanic	64	64
Hispanic	1	3
Asian/Pacific Islander	<1	1
American Indian/ Alaskan Native	1	
More than 1 race	3	
Unknown	5	
Sex		
Male	66	72
Female	34	28
Age (yrs.)		
<13	2	1
14–19	1	1
20–44	68	71
≥ 45	30	27

^aFor an explanation of how racial/ethnic groups were combined, see p. 11.

Most of the visits of the 4,125 Louisiana Title II clients who received services during 2001 involved case management (n = 2,231), followed by medical care (n = 770). Louisiana is unique in that it provides annual funding to 10 regional public medical centers to provide care to uninsured, low-income, or indigent patients, including those living with HIV/AIDS. Therefore, CARE Act funds are used only to supplement primary medical care in areas where gaps in services have been identified (New Orleans, Baton Rouge, and Monroe). Few clients received substance abuse or mental health services (Table 28). In 2001, the average number of visits by Title II clients was highest for case

management services (9 visits/client). Title II clients who sought dental care made an average of 3 visits related to dental care during 2001.

Table 28. Utilization of Ryan White Title II service, by type of service (N = 4,125), Louisiana, 2001

	Case management	Medical	Dental	Mental health	Substance abuse
Clients receiving service (no.)	2,231	770	467	39	13
Visits per client (average no.)	9.0	2.4	3.2	2.1	2.0

In addition to the services listed in Table 28, CARE Act funds were used to provide the following services to clients during 2001: food bank or home-delivered meals (n = 1,682 clients), emergency financial assistance (n = 1,389), transportation (n = 1,194), client advocacy (n = 816), home health care (n = 160), companion or buddy services (n = 134) and a variety of other support services (n = 1,131).

HIV MEDICAL CARE IN LOUISIANA

The prioritization and allocation of Ryan White Title II resources for HIV care require an understanding of the patterns of HIV medical care among persons living with HIV/AIDS, as well as persons already receiving care through Title II services. Monitoring the proportion of HIV-infected persons who receive recommended standards of care may help public health entities to explain differences in morbidity and mortality associated with HIV infection. Although the current HIV/AIDS surveillance system in Louisiana does not collect HIV medical care information, this information may be found in several supplemental surveillance projects that are supported by the CDC. Louisiana conducted one of the supplemental activities, SHDC, in 1998. In addition, the state has been conducting the ASD project, a survey that collects care-related data, since 1990.

AIDS Drug Assistance Program (ADAP)

Since 1987, Congress has appropriated funds to assist states in providing ART, approved by the Federal Drug Administration (FDA), to AIDS patients. With the initial passage of the Ryan White CARE Act in 1990, the assistance programs for ART were incorporated into Title II and became commonly known as ADAP. ADAP now provides FDA-approved HIV-related prescription drugs to underinsured and uninsured persons living with HIV/AIDS. For many people with HIV, access to ADAP serves as a gateway to a broad array of health care and supportive services as well as other sources of coverage, including Medicaid, Medicare, and private insurance.

In Louisiana, since June 2001, persons enrolled in ADAP have been able to receive the following classes of antiretroviral medications: nucleoside analogues, protease inhibitors, and non-nucleosides. According to the National ADAP Monitoring Project Survey, 1,440 clients were served in Louisiana during June 2001. Most Louisiana ADAP clients served during this month were male (69%), 19 years of age or older (100%), either non-Hispanic black (52%) or non-Hispanic white (48%), and lived at or below 200% of the

poverty level (Table 29). Note, however, that the National ADAP Monitoring Project Survey data are based on only 1 month of data collection (June), and the characteristics of persons receiving ADAP-funded services during this month may differ from the characteristics of the persons receiving services during the year.

Table 29. Characteristics of patients enrolled in the AIDS Drug Assistance Program (N = 1,440), Louisiana, June 2001

	Patients, %
Sex	
Male	69
Female	31
Race/ethnicity	
Black, not Hispanic	52
White, not Hispanic	48
Age (yrs.)	
<13	0
13–19	0
≥20	100
Poverty level (%)	
<100	46
101–200	54

Source. National ADAP Monitoring Project, Annual Report, April 2002.

Survey of HIV Disease and Care (SHDC)

The SHDC is a cross-sectional, population-based review of medical records of HIV-infected persons who have been reported to the State of Louisiana. The data presented in this profile are from January 1, 1998 to December 31, 1998. In 1998, the project was in its pilot phase; consequently, records were reviewed only for persons who received medical care for their HIV disease at facilities located in the southeastern part of the state (Regions I, II, III, IV, and IX). Data from future years, however, will be applicable statewide. Because SHDC is a population-based review, inferences can be drawn regarding the level and the types of HIV care experienced by persons who receive care at facilities in southeastern Louisiana. (See Appendix A for details of the SHDC methods.)

Prescription of Antiretroviral Therapy

In 1998, of the persons who received care for their HIV disease at facilities located in southeastern Louisiana, 86% received prescriptions for ART and 64% received prescriptions for HAART from their health care provider (Table 30). For the purpose of this analysis, HAART was defined as two nucleoside analogue reverse transcriptase inhibitors (zidovudine + didanosine, zalcitabine or lamivudine or stavudine + didanosine or lamivudine) plus at least one protease inhibitor (amprenavir, indinavir, nelfinavir, ritonavir, saquinavir) or non-nucleoside analogue reverse transcriptase inhibitor (delaviridine, efavirenz, nevirapine).

Table 30. Prescription of antiretroviral therapy (ART) and highly active antiretroviral therapy (HAART) for HIV-infected patients, by sex, race/ethnicity, and insurance status, Survey of HIV Disease and Care, Louisiana, 1998

	Prescribed ART, %	Prescribed HAART, %
Sex		
Male	87	64
Female	85	66
Race/ethnicity		
White, not Hispanic	92	70
Black, not Hispanic	83	61
Insurance status		
Private	93	76
Public	87	54
No insurance	83	66

The prescribing of ART and HAART differed somewhat by race/ethnicity and by whether patients had private or public insurance. ART and HAART were prescribed for larger proportions of non-Hispanic whites than for non-Hispanic blacks. Because of small numbers, proportions are not shown for other racial/ethnic groups. ART was prescribed for most privately insured patients, and HAART was prescribed for more than three quarters of these patients. In contrast, in 1998, HAART was prescribed for only half of publicly insured patients and two thirds of patients without insurance. ART or HAART were prescribed for similar proportions of males and females.

Opportunistic Infections

PCP was the first opportunistic infection associated with HIV infection. According to the *U.S. Public Health Service/Infectious Diseases Society of America Guidelines for the Prevention of Opportunistic Infections in Persons Infected with Human Immunodeficiency Virus*, HIV-infected persons with CD4+ counts of < 200 cells/microliter should receive PCP prophylaxis; however, discontinuation is possible among persons taking HAART (CDC, 2002). As of 1998, according to SHDC data, PCP had been diagnosed for 6% of HIV-infected patients. PCP had been diagnosed for a

larger proportion of males (8%) than females (1%) and for a larger proportion of white patients (9%) than black patients (3%) (Table 31).

Overall, PCP prophylaxis was prescribed for 58% of patients in New Orleans in 1998. It was prescribed for larger proportions of eligible patients who were female and black than for patients who were male and white (Table 31). The prescribing of PCP prophylaxis differed by insurance status: it was prescribed for nearly twice the proportion of patients who had no insurance, compared with the proportion of those who had private insurance coverage. The difference between patients with private insurance and those who received public assistance was smaller.

Table 31. Current prescription of prophylaxis for *Pneumocystis carinii* pneumonia in HIV-infected patients, by sex, race/ethnicity, and insurance status, Survey of HIV Disease and Care, Louisiana, 1998

	Patients, %
Sex	
Male	54
Female	67
Race/ethnicity	
White, not Hispanic	45
Black, not Hispanic	60
Insurance status	
Private	34
Public	63
No insurance	70

Before or during 1998, 62% of HIV-positive patients were tested for tuberculosis by the tuberculin skin test (TST) (data not shown). Differences in the proportions of patients tested, by sex and race/ethnicity, were small: men (63%) vs. women (58%); non-Hispanic whites (64%) vs. non-Hispanic blacks (59%).

Adult/Adolescent Spectrum of HIV Disease (ASD) Project

The ASD project is a supplemental surveillance project in which data on the clinical characteristics and medical care of HIV-infected persons are collected. ASD is an ongoing, longitudinal surveillance cohort study that describes the full spectrum and progression of HIV disease among HIV-infected persons who receive health care at a participating facility. Since 1990, HIV-infected patients receiving care at the Medical Center of Louisiana at New Orleans, as well as 2 community-based early intervention clinics, have been enrolled in ASD. In contrast to the information presented from SHDC, ASD results are not generalizable to the HIV-infected population. However, ASD data may be used to examine trends in clinical characteristics and the provision of medical care over time. Results from the most recent year (2000) are presented to illustrate the

level of care received among the Louisiana ASD cohort. (See Appendix A for additional details concerning the ASD methods.)

Antiretroviral Therapy

In 2000, HAART was prescribed for 76% of the patients eligible to receive it, according to public health guidelines published in 1999 (Department of Health and Human Services and Henry J. Kaiser Family Foundation, 1999) (Table 32). The prescribing of HAART differed by patients’ sex: HAART was prescribed for more men (79%) than women (68%). Prescribing did not differ by race/ethnicity. Because of the small numbers of cases, proportions are not shown for Asian/Pacific Islanders or other races or persons of unknown race (total number includes these persons).

Table 32. Current prescription of highly active antiretroviral therapy (HAART) in HIV-infected patients, by sex and race/ethnicity, Adult/Adolescent Spectrum of Disease Project (N = 1,695), New Orleans, 2000

	Patients, %
Sex	
Male	79
Female	68
Race/ethnicity	
White, not Hispanic	76
Black, not Hispanic	76
Hispanic	75

Opportunistic Infections

ASD collects information on prophylaxis for OIs such as PCP and MAC. Patients were considered eligible for primary PCP prophylaxis if they had a history of an AIDS-related opportunistic infection or a CD4+ count of <200 cells/microliter and if PCP had not been diagnosed previously. PCP prophylaxis was defined as the prescribed use of trimethoprim-sulfamethoxazole, dapsone, aerosolized pentamidine, or atovaquone, alone or in combination, before, or in the absence of, a diagnosis of PCP. Overall, PCP prophylaxis was prescribed for 76% of all eligible patients in 2000. It was prescribed for a slightly larger proportion of eligible patients who were male than for those who were female and for a larger proportion of patients who were non-Hispanic black than for those who were non-Hispanic white or Hispanic (Table 33).

Table 33. Prescription of prophylaxis for primary *Pneumocystis carinii* pneumonia in HIV-infected patients, by sex and race/ethnicity, Adult/Adolescent Spectrum of Disease Project (N = 945), New Orleans, 2000

	Patients, %
Sex	
Male	78
Female	71
Race/ethnicity	
White, not Hispanic	69
Black, not Hispanic	80
Hispanic	69

Primary MAC prophylaxis was prescribed for 70% of eligible patients (i.e., CD4+ count of <50 cells/microliter and no prior diagnosis of MAC). This therapy was prescribed for similar proportions of male and female patients (Table 34) and for a larger proportion of black patients (75%) than for white (59%) or Hispanic (43%) patients.

Table 34. Prescription of prophylaxis for *Mycobacterium avium* complex in HIV-infected patients, by sex and race/ethnicity, Adult/Adolescent Spectrum of Disease Project (N = 449), New Orleans, 2000

	Patients, %
Sex	
Male	70
Female	72
Race/ethnicity	
White, not Hispanic	59
Black, not Hispanic	75
Hispanic	43

HIV Testing Delays

With the current availability of antiretroviral medications, which have often been successful in treating HIV-infected persons, it is important that people be tested early for HIV so that they can benefit from these advances in treatment. However, a significant number of people are not tested until they are immunosuppressed or sick. Of the persons who had a positive result from a confidential HIV test during 1996–2000 and were reported to the state’s HIV/AIDS Surveillance Program, one third had an AIDS diagnosis within 3 months of their first positive HIV test result. Table 35 shows the time between a person’s first positive confidential test and AIDS diagnosis, by demographic and risk characteristics. These data should be interpreted cautiously,

Table 35. Proportions of persons with AIDS diagnosis, by time between first positive HIV test result and AIDS diagnosis (N = 6,956), Louisiana, 1996–2000

	AIDS diagnosis, %		
	At time of first HIV+ test result	≤ 3 Months ^a	≤ 12 Months ^b
Overall	22	32	37
Gender			
Male	25	36	41
Female	15	23	27
Race			
White, not Hispanic	27	38	41
Black, not Hispanic	20	30	35
Exposure category			
Male-to-male sex	30	43	48
Injection drug use	24	37	44
Male-to-male sex and injection drug use	19	34	38
Heterosexual contact	17	27	32
Other	24	34	35
Unspecified	18	26	30
Age (yrs.)			
0–14	10	15	16
15–24	7	12	14
25–34	21	31	36
35–44	26	39	45
≥ 45	31	43	48
Public health region			
I	23	33	38
II	17	28	34
III	29	39	42
IV	19	30	34
V	27	37	39
VI	16	28	33
VII	23	36	39
VIII	22	34	40
IX	29	38	43

^aIncludes persons given AIDS diagnosis at time of first positive test result.

^bIncludes persons given AIDS diagnosis within 3 months of, or at time of, the first positive HIV test result.

however, because a person may have been tested earlier, but anonymously. In groups with higher rates of anonymous testing (e.g., white males), these data may overestimate the true proportion of persons who are tested late.

Among persons who were tested confidentially during 1996–2000, men were tested later than women, and white persons were tested later than black persons. For groups in which larger proportions were tested anonymously, these estimates of HIV testing delays are likely to overestimate the proportion who enter care late. Moreover, estimates of late testing and delayed access to care seem to be inconsistent with other surveillance data

(not shown) that indicate that the greatest declines in new AIDS cases and AIDS-related mortality have occurred among whites and men.

Reference

Department of Health and Human Services and Henry J. Kaiser Family Foundation. Guidelines for the use of antiretroviral agents in HIV-infected adults and adolescents, May 5, 1999. Available at: <http://www.hivatis.org>.